

TYURENKOY, M.G.

Flow sheet for the dressing of the Angara-Ilim region iron  
ores. Trudy Uralmekhanobra no.5:74-86 '59. (MIRA 15:1)  
(Angara Valley--Iron ores)  
(Ore dressing)

TYURENKOV, N.G.

Flow sheet for the dressing of Alapayevsk ores. Trudy  
Uralmekhanobra no.5:87-103 '59. (MIRA 15:1)  
(Alapayevsk region--Iron ores)  
(Ore dressing)

TYURENKOV, N.G., kand.tekhn.nauk; Gerasimov, A.G., kand.tekhn.nauk;  
Luk'yanov, S.M.

Flowsheet used for the dressing of Korshunikha ores. Gor.zhar.  
no.7:69-71 Jl '60. (MIRA 13:7)

1. Uralmekhanobr, Sverdlovsk (for Tyurenkov), 2. Zavod Sibelektrostal', Krasnoyarsk (for Gerasimov, Luk'yanov).  
(Korshunikha Valley---Iron ores)  
(Ore dressing)

TYURENKOv, N.G.; BUCHEL'NIKOV, S.M.; SUSLIKOV, G.F.

Industrial testing of Kachkanar deposit titanium-magnetite  
ores. Trudy Uralmekhanobra no.5:58-73 '59. (MIRA 15:1)

1. Ural'skiy nauchno-issledovatel'skiy institut mekhanicheskoy  
obrabotki poleznykh iskopayemykh (for Tyurenkov). 2. Ural'skiy  
filial Akademii nauk (for Buchel'nikov). 3. Zavod "Sibelektro-  
stal'" (for Suslikov).

(Kachkanar Mountain--Iron ores)

SOV/137-58-9-18246

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 4 (USSR)

AUTHORS: Tyurenkov, N. G., Suvorov, F. S.

TITLE: Concentration of Bakal Ores (Obogashcheniye bakal'skikh rud)

PERIODICAL: V sb.: Vopr. razvitiya Bakal'sk. rudn. bazy. Sverdlovsk, 1957, pp 201-210

ABSTRACT: The results of investigations on the capacity for concentration of Bakal ores are presented. It is noted that ~75% of these ores can be prepared for smelting by drying, screening, and agglomeration of fines. The remaining portion of the ores would demand more complicated procedures with magnetizing roasting followed by magnetic separation. The most important problems demanding solution in further investigation are indicated.

1. Ores--Concentrates    2. Ores--Preparation    3. Ores  
--Separation    4. Ores--Analysis                      I. M.

Card 1/1

TYURENKO, N.G.

Determining the lower limit of the industrial metal content in ore.  
Razved. i okh. nedr 20 no.5:14-17 S-0 '54. (MLRA 10:1)  
(Ores--Sampling and estimation)

TYURENKO, N.G., kandidat tekhnicheskikh nauk.

A graphic method of determining ore dressing indexes. Gor.zhur.  
no.2:56 p!55. (MLRA 8;7)  
(Ore dressing)

TYURENKO<sup>V</sup>, N.Q., kand.tekhn.nauk; KOSTYUNIN, A.A., inzh.; KOSTIN, I.M.,  
kand.tekhn.nauk

Faults in the operation of iron ore dressing plants. Gor. zhur.  
no.4:56-59 Ap '61. (MIRA 14:4)

1. Uralmekhanobr (for Tyurenkov). 2. Abagurskaya fabrika (for  
Kostyunin). 3. Gornoye upravleniye Magnitogorskogo metallurgi-  
českogo kombinata, Magnitogorsk (for Kostinin).  
(Ore dressing)

ACC NR: AR6026538

SOURCE CODE: UR/0372/66/000/004/G053/G053

AUTHOR: Tyurenkov, V. A.

TITLE: Designing the shortest connections

SOURCE: Ref. zh. Kibernetika, Abs. 4G369

REF SOURCE: Sb. Vychisl. sistemy. Vyp. 18, Novosibirsk, 1965, 92-118

TOPIC TAGS: graph theory, printed circuit, circuit design, circuit theory

ABSTRACT: A method of shortening to a minimum the connections on a printed-circuit plate is proposed, reducing this problem to that of plotting the shortest paths in a graph with a small number of edges and nodes. A method of constructing this graph for any real [wiring diagram] is described, and the principles complicating the extension of this method to arbitrary circuits are formulated. It is pointed out that the proposed methods may also be utilized in the search for shortest paths in navigation, in planning roads on rugged terrain, etc. 2 illustrations, bibliography of 16 titles. V. B.-B. [Translation of abstract]

SUB CODE: 12/09

Card 1/1

UDC: 62-506:681.142:62

وَمِنْهُمْ مَنْ يَرْجُوا أَنْ يُخْلَدُوا فِي الْأَرْضِ  
وَمِنْهُمْ مَنْ يَرْجُوا أَنْ يُخْلَدُوا فِي الْأَنْهَارِ

3. 11-1533/300-306-3242, 306+

### WATER PURIFICATION

1990-1991  
Yearbook  
Volume 41

19. *Leucosia* *leucostoma* *leucostoma* *leucostoma* *leucostoma*

2021-01-13 10:45:00 2021-01-13 10:45:00

—  
—  
—

“*It is the first time in my life that I have been so deeply moved by a speech.*”

1944-1945 - 1945-1946 - 1946-1947 - 1947-1948

Figure 1. The effect of the number of iterations on the convergence of the solution.

1940-1941  
1941-1942  
1942-1943  
1943-1944  
1944-1945

1.3. *CONCLUDING REMARKS* - 1.3.1.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

47728-1  
ASSOCIATION OF MATHEMATICIANS

ASSOCIATION: Institut mathématique de l'Institut Institute of Mathematics, BO AN 858R)

CHARACTER: SUB CODE: DP, SC

NO INFORMATION

Page 2 / 2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

BEDNYAGINA, N.P.; TYURENKOVA, G.N.; PANOV, I.V.

Benz-and naphthazole series, Part 5; 5,6-dimethyl-2-hydrazinobenzimidazole and its N-alkyl-substituted derivatives. Zhur. ob. khim. 34 no. 5:1575-1577 My '64. (MIRA 10:7)

1. Ural'skiy politekhnichesiiy institut imeni Kirova.

TYURENKOVA, G.N.; SILINA, Ye.I.; POSTOVSKIY, I.Ya.

Some N-substituted benzimidazoles and their flotation properties.  
Zhur.prikl.khim. 34 no.10:2327-2331 O '61. (MIRA 14:11)

1. Ural'skiy filial AN SSSR i institut "Uralkhokhmechhanobr".  
(Benzimidazole) (Flotation)

TYURENKOVA, G.N.; LIPATOVA, L.F.; POSTOVSKIY, I.Ya.

Collector action of certain substituted 2-mercaptopbenzimidazoles.  
TSvet.met. 36 no.2:77-80 F '63. (MIRA 16:2)  
(Flotation—Equipment and supplies)  
(Mercapto compounds)

TYURENKOVA, G.N.; KAKOVSKIY, I.A.

Naphthazolethiones as potential collectors for oxide and sulfide  
lead and copper minerals. Izv. vys. ucheb. zav.; tsvet. met. 6  
no.3:47-50 '63. (NIKA 16:9)

I. Ural'skiy politicheskiy institut, kafedra metallurgii blago-  
rudnykh metallov.  
(Flotation—Equipment and supplies) (Lead ores)  
(Copper ores)

**1st AND 2nd ORDERS**

## PROCESSES AND PROPERTIES UNDER

100 AND 8TH STREET

**Preparation of coal at the Gubakha washery.** N. G. Tyurenkov. *Zhurn. Obshch. Akad. No. 1, 1917.* 1917-1937.  
The Gubakha washery is one of the largest in the Soviet Union. Its planned capacity is 330 tons/hr. It is equipped with settling machines and concen. tables. The concentrate was to contain 10% ash and 3-3.5% S. The washery started operations at the end of 1930. During the first half of 1937 the output was 150 tons/hr. The concentrate had 11% ash and 3.5% S. The middlings and tailings had 24.6-29.8 and 43.8-48.5% ash, resp. B. Z. Kamich

B. Z. Kaniuk

二

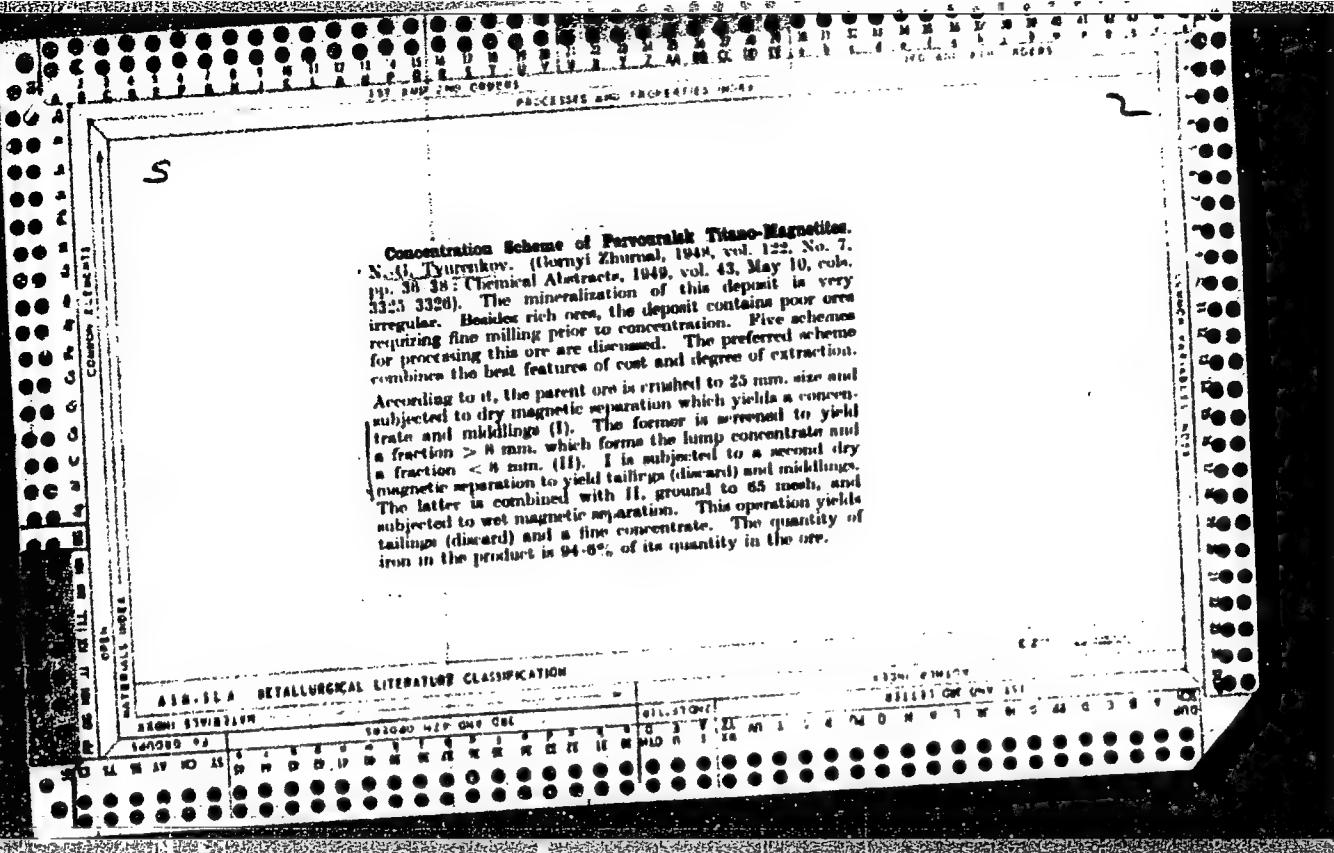
21

## GENERAL LITERATURE CLASSIFICATION

卷之三十一

**APPROVED FOR RELEASE: 08/31/2001**

CIA-RDP86-00513R001757730003-8"



TYURENKOVA, O.A.; BONDARYUK, V.V.

Possibility of regenerating a palladium polyvinyl alcohol catalyst.  
Kin. i kat. 6 no.2:336-337 Mr-Ap '65. (MIRA 18:7)

1. Kurganskiy sel'skokhozyaystvennyy institut.

"APPROVED FOR RELEASE: 08/31/2001

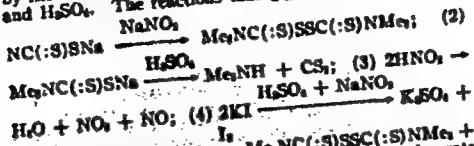
CIA-RDP86-00513R001757730003-8

TYURKHOVA, O. A.  
P. F. KALPUKHIN, Trudy Knarkov, Khim. Tekhnol Inst in S. M.  
Kirova, 1944, (4), 81-87

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

O. A. Tyurenkova, Khimicheskaya Prom. 1944, No. 10/11, 33-4. The last stage in the prep. of thiuram, the oxidation of dimethyl dithiocarbamate, is greatly simplified by the use of KI in addition to the usually employed  $\text{NaNO}_3$  and  $\text{H}_2\text{SO}_4$ . The reactions taking place are: (1)  $2\text{Me}_2\text{SC}(\text{S})\text{NMe}_2 + \text{NaNO}_3 \rightarrow \text{Me}_2\text{SC}(\text{S})\text{NMe}_2 + \text{NaSC}(\text{S})\text{NMe}_2$ ; (2)



1.; (6)  $2\text{MeNC}(\text{:S})\text{Na} \xrightarrow{\text{I}_2}$   $\text{MeNC}(\text{:S})\text{SSC}(\text{:S})\text{NMMe}_2 + 2\text{NaI}$ . Reaction (1) sets in first. Gradually its rate diminishes and (4) becomes noticeable. Soon the rate of (4) exceeds (1). Thus, one oxidant is replaced by another (iodine). Reaction (5) is thus started. Its rate is such that (2) is practically suppressed and decomps. of the carbamate is inhibited. NaI formed in (5) reacts with  $\text{HNO}_3$ , thereby providing fresh iodine. Reactions (2) and (3) are practically blocked. The kinetics of this process can be observed when it reaches (4) and (6). To this end a little starch is added to the reaction mixt. Under lab. conditions approx. 0.06 mol. of KI was added per mol. of product. Under such conditions the reaction was almost quant. and was completed in 10-15 min. whereas with  $\text{NaNO}_2$  alone it required 2-2.5 hrs.  $\text{H}_2\text{SO}_4$  is added slowly to the initial reaction mixt. The advantages of this method are (a) no special app. is required as it can be carried out in wooden tanks; (b) there is no waste of raw materials since only very little of KI (replacing  $\text{Na}_2\text{CO}_3$ ) is required; (c) the process is greatly accelerated; and (d) the yield of thiuram is quant. whereas oxidation with  $\text{NaNO}_2$  alone yields not over 80% in a  $\text{H}_2\text{SO}_4$  medium and approx. 90-93% in a carbonate medium.

M. Hirsch

**ASME-SEA METALLURGICAL LIBRARY**

**APPROVED FOR RELEASE: 08/31/2001**

CIA-RDP86-00513R001757730003-8"

TYUPENKOVA, G.A.; YASTREBSVA, G.P.

Reaction of anise with ethanol. Zhur. fiz. khim. 38 no. 6:  
1642-1644 Ja '64. (AFPL 18:1)

1. Kurganskiy sel'skokhozyaystvennyy institut.

USSR/Gonoral and Systematic Zoology. Insects. Harmful.  
Insects and Acarids. Forest Posts. P

Abs Jour : Ref Zhur - Biol., No 3, 1959, No 11681

Author : Tyurganova A.Yo.

Inst : Moldavian Scientific-Research Institute of Agri-

Title : culturo.  
Chemical Means in the Control of the Oak Foliago  
Pests in the Field-Protecting Forest Belts.

Orig Pub : Byul. nauchno-tekh. inform. Mold. n.-i. in-ta  
s. kh., Kishinev, 1957, 74-78.

Abstract : Young oaks in the forest belts of the Moldavian  
Scientific-Research Institute of Agriculture are  
harmed by almost 90 species of insects. The most  
harmful are the brown-tailed moth, the lackey moth  
and, particularly, the green oak leaf-roller. On  
the basis of experiments and economic verification

Card : 1/2

- 49 -

ACCESSION NR: AR4035565

S/0271/64/000/003/B015/B015

SOURCE: Ref. zh. Avtomat., telemekh. i vy\*chisl. tekhn. Av. t., Abs. 3B72

AUTHOR: Tyurenkov, V. A.

TITLE: Algorithm for finding the shortest distance

CITED SOURCE: Sb. Vy\*chisl. sistemy\*. Vy\*p. 6, Novosibirsk, 1963, 41-44

TRANSLATION: An algorithm is described for finding the shortest connection between configurations B and C in the course of laying out a printed circuit. The entire area of the mounting plate is theoretically divided by horizontal and vertical lines into square elements whose sides are equal to the minimum thickness of the conductor. For programming, it is essential that minimum amount of numbers be used for marking the boxes. The algorithm A( $m$ ) of the shortest distance from  $(B, \Gamma_B)$  to  $(C, \Gamma_C)$ , where  $(B, \Gamma_B)$  and  $(C, \Gamma_C)$  are connected subgraphs,  $(\Gamma, X)$  is a nonoriented coherent graph without loops, and  $n \bmod m$  is the least nonnegative number comparable with  $n$  by its modulus  $m$ , includes the following steps: (1) apices of the set 3 are marked off with index 0; (2) the apices of each set  $\Gamma'(B) - \Gamma^{i-1}(B)$ ,  $i=1,2$ , are marked off in secession by indices 1 ( $\bmod m$ ) up to

Card 1/2

ACCESSION NR: AR4035565

the point when one of the apices of the set C has been marked off; (3) the marked apex of the set C is accepted as a point of departure and is denoted  $x_0$ ; (4) in the set  $\Gamma(x_i)$ , we select one of the apices marked with  $i \equiv 1 \pmod{m}$ , where  $i$ , is the index of the apex  $x_i$ ; the selected apex is denoted with  $x_{i+1}$ . The step (4) is repeated until one of the apices of the set B is picked. A proof is given that for any graph the problem of finding the shortest distance between the connected subgraphs  $(B, \Gamma_i)$  and  $(C, \Gamma_i)$  can be solved by the algorithm A. It follows from the theorem that the minimum value of  $m$  equals 3. The algorithm A was successfully used in laying out a printed circuit on a mounting plate. Thanks to the reduction of numbers, only two digits in the operational storage cells were required. Bibliography: 3 titles.

DATE ACQ: 17Apr64

SUB CODE: EC

ENCL: 00

Card 2/2

TYURI, E.I. [Turi, E.], SILD, M.E. [Sild, M.]

Virulence of phthivazide-resistant and catalase-negative strains of  
mycobacteria tuberculosis for guinea pigs following intratesticular  
infection. Probl. tub. no.2#73-73 '64.

(MIRA 17:12)

1. Kafedra mikrobiologii (zav. ... dotsent E.T.Tal'meyster [Talmelster,  
E.]) Tartuskogo universiteta.

LAANES, S.Xh. [Laanes, S.H.], kand.med.nauk, TYURI, N.I. [Turi, E.I.]

Early changes in organs of the guinea pig in experimental tuberculosis  
[with summary in French]. Probl.tub. 36 no.6:94-97 '58 (MIRA 11:10)

1. Iz kafedry infektsionnykh bolezney i dermatologii (zav. - doktor  
med.nauk, zaalyzhennyy deyatel' nauki Estonskoy SSR prof. F.Ya. Lepp)  
Tartuskogo gosudarstvennogo universiteta.

(TUBERCULOSIS, exper.  
early changes in organs of guinea pigs (Rus))

LAANES, S.Kh. [Laanes, S.H.], kand.med.nauk; TYURI, E.I. [Türi, E.I.]

Development of experimental tuberculosis following inoculation  
of guinea pigs in the testicle. Probl.tub. no.5:94-96 '61.  
(MIRA 15:1)

1. Iz kafedry infektsionnykh bolezney i dermatologii (zav. -  
doktor med.nauk, zasluzhennyy deyatel' nauki Estonskoy SSR  
prof. F.Ya. Lenn) Tartuskogo gosudarstvennogo universiteta.  
(TUBERCULOSIS)

TYURI, E.I. [Turi, E.]; TYURI, M.E. [Turi, M.]

Pathogenicity of various mycobacteria for guinea pigs following  
intratesticular and subcutaneous infection. Probl. tub. 42  
no.10:74-79 '64. (MIRA 18:11)

1. Kafedra mikrobiologii (zav.- dotsent E.T. Tal'meyster  
[Tallmeister,E.]) Tartuskogo universiteta Estonskoy SSR.

TYURI, E.I. [Turi, E.]; TYURI, M.E. [Turi, M.]

Pathogenicity of various mycobacteria for guinea pigs following  
intratesticular and subcutaneous infection. Probl. tub. 42  
no.10:74-79 '64. (MIRA 18:11)

1. Kafedra mikrobiologii (zav.- dotsent F.T. Tal'meyster  
(Tallmeister,E.)) Tartuskogo universiteta Estonskoy SSR.

L'VOV, S.V.; FAL'KOVSKIY, V.B.; KOSTYUK, N.G.; STARKOV, A.V.; GOLENKOVA,  
I.B.; KUSKOVA, N.B.; TYURICHEVA, T.A.

Continuous method of preparation of isovaleric acid from isoamyl  
alcohol by a catalytic reaction. Zhur.prikl.khim. 35 no.3:700-  
701 Mr 62. (MIRA 15:4)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
M.V.Lomonosova.  
(Isovaleric acid) (Isopentyl alcohol)

FAL'KOVSKIY, V.B.; KALMYKOVA, Ye.M.; TYURICHEVA, T.A.; L'VOV, S.V.

Oxidation of toluene by oxygen in bubble columns. Izv.vys.ucheb.zav.;-  
khim.i khim.tekh. 6 no.1:125-127 '63. (MIRA 16:6)

I. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
Lomonosova, kafedra tekhnologii osnovnogo organicheskogo sinteza.  
(Toluene) (Oxidation)

FAL'KOVSKIY, V.B.; TYURICHEVA, T.A.; KALMYKOVA, Ye.M.; L'VOV, S.V.

Preparation of glutaric acid by the oxidation of cyclopentanone  
with oxygen. Izv.vys.ucheb.zav.;khim. i khim.tekh. 6 no.2:  
344-345 '63. (MIRA 16:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
Lomonosova, kafedra tekhnologii osnovnogo organicheskogo sinteza.  
(Glutaric acid) (Cyclopentanone) (Oxygen)

PA 1/49T3

TYURIK, I. I.

USSR/Electricity

Bus Bars

Electric Systems

May 48

"Distributing Installations With One System of Bus  
Bars of the Leaning Type With Overhead Outlets,"  
I. I. Tyurik, Engr, Energoproektneft', 6 pp

"Energet Byul" No 5

High degree of standardization and portability of  
oil well equipment causes electrical supply to lag  
behind rest of installation. Describes prefabricated  
electrical distributing station which can be erected  
where required!

1/49T3

FDR

PETROV, N.P., kand.tekhn.nauk; TROSHKIN, I.T., inzh.; SHAYHOV, N.N., inzh.;  
TYURIKHOV, S.H., inzh.

Modernization of PN00E-60 atmosphere preparation plants. Metalloved. i  
term. obr. met. no.2:45-48 J '61. (MIRA 14:3)

1. Moskovskiy tekhnologicheskiy institut i Mashinostroitel'nyy zavod  
Mosgorskmarkhoza.  
(Metallurgical furnaces—Protective atmospheres)

BURDASTYKH, Yegor, tekhnolog (g.Orel); MAKAROV, V. (g.Arzamas); KARPUSHCHENKO, V. (Leningrad); SHTENNIKOV, F., personal'nyy pensioner (g.Gor'kiy); GODILO, A., kontrol'nyy master (g.Cherkessk); VOLKOV, P., inzh.-tekhnolog (g.Cherkassk); BURLAK, M. (g.Makeyevka); BELYAYEVSKIY, V., inzh. po izobrstatel'stvu i ratsionalizatsii (g. Kirovakan); TYURIKOV, A. (g.Omsk)

This is the way we live. Izobr.i rats. no.1:11 '64.

1. Zavod imeni Medvedeva (for Burdastykh). 2. Chlen Soyusa zhurnalistov SSSR (for Godilo). 3. Cherkesskiy zavod kholdil'nogo oborudovaniya, Cherkessk (for Godilo, Volkov). 4. Chlen redkollegii mnogotirazhki makeyevskogo metallurgicheskogo zavoda "Kirovets", g. Makeyevka (for Burlak). 5. Rukovoditel' Omskogo obshchestvennogo konstruktorskogo byuro zheleznodorozhnikov (for Tyurikov).

(MIRA 17:4)

DOROSHEVICH, Anatoliy Titovich; TYURIKOV, Aleksandr Afanas'yevich;  
MAMONTOV, Roman Romanovich; POTOTSKIY, G.I., red.; BOBROVA,  
Ye.N., tekhn.red.

[Track maintenance on roads carrying heavy loads; work practices  
of the Kalachinsk section of the Omsk Railroad] Soderzhanie puti  
v usloviakh vysokoi gruzonapriazhennosti; opyt raboty Kalachinskoi  
distantsi puti Omskoi dorogi. Moskva, Vses.izdatel'sko-poligr.  
ob"edinenie M-va putei soobshcheniya, 1960. 47 p.

(Railroads--Maintenance and repair)

(MIRA 13:9)

TYURIKOV, A.A.

Planning a railroad workers' town.. Put' i put.khoz. 4 no.2:  
21 F '60. (MIRA 13:5)

1. Glavnnyy inzhener sluzhby puti, g. Omsk.  
(Omsk--Labor and laboring classes--Dwellings)

TYURIKOV, A.A.

Experience in using graphite lubrication. Put' i put.khoz. 4  
no.6:9-11 Je '60. (MIRA 13:7)

1. Glavnyy inzhener sluzhby puti, g.Omsk.  
(Graphite) (Railroads--Rails)

TYURIKOV, A.A.

Planning and organization of track maintenance. Put' i put.  
khoz. 4 no. 12:11-13 D '60. (MIRA 13:12)

1. Glavnnyy inzhener sluzhby puti, g.Omsk.  
(Railroads--Maintenance and repair)

BAYEV, N.V.; BOBROV, Ye.G.; DEMIDOV, G.A.; DENISOV, A.D.; ZHUKOV, N.Ya.;  
LELEKOV, Yu.S.; POZDNYAKOV, I.M.; POLKOVNIKOV, B.M.; TRIBURT, I.I.;  
TYURIKOV, A.A.; SHESTAKOV, A.I., inzh.; PESKOVA, L.N., red.;  
KHITROVA, N.A., tekhn. red.

[Advanced technology on railroads] Peredovaia tekhnologija na  
zheleznoi doroge. Moskva, Vses. izdatel'sko-poligr. ob"edine-  
nie M-va putei soobshchenija, 1961. 84 p. (MIRA 14:12)  
(Railroads)

TYURIKOV, A.A.

Designer's bureau in a division. Put' i put. khoz. 7 no.11:  
36-37 '63. (MIRA 16:12)

1. Zamestitel' nachal'nika Omskoy distantsii Zapadno-Sibirskoy  
dorogi.

TYURIKOV, A.A.

Track inspection by means of mechanisms. Put' i put.khoz. 7 no.1:20-21  
'63. (MIRA 16:3)

1. Zamestitel' nachal'nika Omskoy distantsii Zapadno-Sibirskoy  
dorogi.  
(Railroads--Equipment and supplies)

LOSHCHININ, A.V.; TERENT'YEV, N.K.; TYURIKOV, A.I.; AFANAS'YEV,  
Ye.V., retsenzent; PROKHOROV, A.A., retsenzent; PESKOVA,  
L.N., red.; ZHDANOV, P.A., red.; BOEROVA, Ye.N., tekhn.red.

[Safety measures and industrial hygiene in railroad trans-  
portation] Tekhnika bezopasnosti i proizvodstvennaia sanita-  
riia na zheleznodorozhnom transporte; spravochnaia kniga.  
Izd.2., dop. Moskva, Transzheldorizdat, 1963. 535 p.  
(MIR. 17:2)

TYURIKOV, A.I.

Improve working conditions and safety measures at washing and  
steaming depots. Zhel. dor. transp. 40 no.8:79-80. Ag '58.  
(MIRA 11:9)

1.Tekhnicheskiy inspektor otdela okhrany truda TSentral'nogo komiteta  
profsoyuza rabochikh zhelezodorozhного transporta.  
(Railroads--Sanitation) (Railroads--Safety measures)

LOSHCHILIN, Andrey Vasil'yevich; TERENT'YEV, Nikolay Konstantinovich;  
TYURIKOV, Aleksandr Ivanovich; RAKITIN, G.A., retsenzent; OZEMBLOVSKIY,  
Ch.S., retsenzent; SHCHERBAKHEVICH, G.S., retsenzent; SMUSHKOV, P.I., re-  
tsenzent; SHILKIN, P.M., retsenzent; FEDOSEYEV, N.P., retsenzent;  
RESHETNIKOV, V.Ye., retsenzent; PESKOVA, L.N., red.; ZHDANOV, P.A., red.;  
KHITROV, P.A., tekhn. red.

[Safety engineering and industrial sanitation in railroad transportation;  
handbook]Tekhnika bezopasnosti i proizvodstvennaiia sanitaria na zhelezno-  
dorozhnom transporte; spravochnaya kniga. Pod obshchey red. P.A.Zhdanova.  
Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniya,  
1961. 455 p. (MIRA 14:12)

(RAILROAD—SAFETY MEASURES) (RAILROADS—SANITATION)

TYURIKOV, A.S.

Some results of the operation of the Adyge Canning Factory.  
Kons. i ov. prom. 13 no.8:39-41 Ag '58. (MIRA 11:9)

1. Adygeyskiy konservnyy kombinat.  
(Adyge Autonomous Province--Canning industry)

- KHRULEV, V.M., kand.tekhn.nauk; TYURIKOV, F.T., inzh.

Simplified method of manufacturing lightweight particle boards.  
Der.prom. 10 no.12:15-16 D '61. (MIRA 14:12)

1. Zapadno-Sibirskiy filial Akademii stroitel'stva i arkhitektury  
SSSR.  
(Hardboard)

CHUDINOV, Boris Stepanovich; TYURIKOV, Fedor Timofeyevich; ZUBAN',  
Petr Yefimovich; BASKAKOV, Ye.D., red.

[Larch wood and its processing] Drevesina listvennitsy i  
ee obrabotka. Moskva, Lesnaia promyshlennost', 1965. 143 p.  
(MIRA 18:5)

CA  
TYURIKOV, G-S.

Mechanism of the action of the nickel oxide electrode  
I. B. V. Feshler, O. N. Tyurikov and A. D. Smirnova  
*J. Russ. Chem. (U. S. S. R.)* 14, 185 n (1961). It is usually assumed that charging of the  $\text{Ni(OH)}_2$  electrode involves liberation of  $\text{H}_2\text{O}$ , and discharging consumes  $\text{H}_2\text{O}$  from the electrolyte. To check this assumption a  $\text{Ni(OH)}_2$  electrode was charged in KOH; the decrease of KOH concn. corresponded with 1.1-2.0 mols. of  $\text{H}_2\text{O}$  per faraday in 4.2 N and 2.3-3.0 mols. of  $\text{H}_2\text{O}$  in 1.0 N. On a subsequent discharge an apparent consumption of 1.4-2.6 and 2.8-3.8 mols.  $\text{H}_2\text{O}$ , resp., per faraday took place. These effects were, however, only apparent since the concn. of  $\text{K}_2\text{CO}_3$  or KCl added to KOH remained almost const. during charge and discharge. KOH concn. changes because of a sorption or desorption of KOH by  $\text{Ni(OH)}_2$ .  
B. C. P. A.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

TYURIKOV, G.S.; FEDOTOV, N.A.

Laboratory method for analyzing a radioactive gas having soft  
radiation ( $\text{CO}_2^{14}\text{Hl}^3$ ). Zav.lab. 22 no.10:1201-1202 '56.  
(MLRA 10:5)

I.Nauchno-issledovatel'skiy fiziko-khimicheskiy institut.  
(Radioactivity--Instruments)  
(Gases--Analysis)

Tyurikov, G. S.

20-3-39/59

AUTHORS: Chernykh, V. Ya., Pshezhetskiy, S. Ya.,  
Tyurikov, G. S.,

TITLE: Kinetics of the Decomposition of Hydrogen Peroxyde Under the Action of Gamma Rays (Kinetika razlozheniya perekisi vodoroda pod deystviem gamma-izlucheniya)

PERIODICAL: Doklady Akad. nauk SSSR, 1957, Vol. 115, Nr 3, pp. 560-563, (USSR)

ABSTRACT: This kind of kinetics in aqueous solutions under the influence of ionizing radiation has been investigated in a number of papers, which, however, show differing results in many respects. This can apparently be traced back to the circumstance, that measurements have been executed at different and narrowly limited concentrations of H<sub>2</sub>O<sub>2</sub> and, in general, in diluted solutions. It was interesting to clarify, to what extent actual kinetic laws depend on the range of concentration, in which the measurements have been executed. Of special interest were the kinetics of this reaction in concentrated solutions. The aforementioned kinetics were investigated in the wide range from 2 to 92 Mol H<sub>2</sub>O<sub>2</sub>. Co<sup>60</sup> served as a source for  $\gamma$ -radiation with an activity of 80 Curie and a mercury lamp PRK-2 as a source for ultraviolet radiation. The radiation intensity was varied by altering the distance from the radiation source. Kinetic of the reaction, initiated by  $\gamma$ -radiation: Fig 1 shows how the reaction velocity depends on the concentration of H<sub>2</sub>O<sub>2</sub>. From it can be seen, that this velocity as a function

Card 1/3

20-3-39/59

Kinetics of the Decomposition of Hydrogen Peroxyde Under the Action of Gamma Rays.

of the  $H_2O_2$  concentration passes through a maximum at all temperatures. The velocity is proportional to the root from the radiation intensity at all concentrations (1,78-92,23 Mol). The dependency of the decomposition velocity on the temperature (+50, 30, 10, 1°, -4, -11, -21° and -30°). A linear dependency  $lgW(1/T)$  exists in the case of all solutions. At above 10°C this straight line shows a bend. The precipitation of oxygen increases above 10°, if the solution is stirred. In this case the reaction velocity is covered up by diffusion. The production, calculated in relation to the energy absorbed, depends on the tempeerature and on the concentration and characterizes a chain process. Kinetics of thermal reaction: Below 10°C its velocity is small and hardly measurable. Fig 2 shows, that the dependency on the concentration has the same character. The average value of the activation energy amounts to  $12,5 \pm 1,5$  Kcal/Mol. Kinetics of decomposition under the influence of ultra-violet radiation: Fig 3 shows the dependency on the concentration. The curve  $lgW(1/T)$  has a bend at above 10°C, which can be removed by stirring. The value of the activation energy approximates the value of the reaction under the influence of  $\gamma$ -radiation. Equation of kinetics and the most probable mechanism of the reaction: The latter is independent of the character of initiation. Fig 4 shows,that the equation:

Card 2/3

Kinetics of the Decomposition of Hydrogen Peroxyde Under the Action of 20-3-39/59  
Gamma Rays.

$$W = - \frac{d[H_2O_2]}{dt} \sim K \sqrt{J [H_2O_2] [H_2O]}$$

can be complied with. There is a satisfactory compliance with the experiment on photo- and thermo- dissoziation in every range of concentration and at all temperatures. It can be maintained, that in a number of cases the equations of the velocity of the radiation dissociation reaction in other papers represent approximations to the actual kinetic law of reaction in various limited ranges of concentration of diluted solutions of  $H_2O_2$ . There are 4 figures and 2 Slavic references.

ASSOCIATION: Physical-Chemical Institute imeni L. Ya. Karpov (Fiziko-khimicheskiy institut im. L. Ya. Karpova)

PRESENTED BY: Academician Kargin, V. A., February 16, 1957

SUBMITTED: February 4, 1957

AVAILABLE: Library of Congress

Card 3/3

CHERNYKH, V. Yu., PSHEZMETSKIY, S. Ya. and TYURIKOV, G. S.

"Kinetics of Decomposition of Hydrogen Peroxide Under the Action of Gamma Radiation" p.83

Trudy Transactions of the First Conference on Radioaction Chemistry, Moscow,  
Izd-vo AN SSSR, 1958. 330pp.  
Conference -25-30 March 1957, Moscow

AUTHORS: Tyurikov, G. S., Rozental', K. I., Veselovskiy, V. I. SOV/76-32-7-8/45

TITLE: The Mechanism of the Electrochemical Reactions on a Mercury Cathode in Uranium Salt Solutions (Mechanizm elektrokhimicheskikh reaktsiy v rastvorakh soley urana na rtutnom katode)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 7,  
pp. 1490 - 1498 (USSR)

ABSTRACT: The electrochemistry of uranium has been investigated by a great number of scientists, there are, however, a number of contradictions in publications. In a previous paper one of the authors of this paper carried out polarographic investigations on a dropping mercury electrode, as well as on a steady mercury electrode in the case of a weak polarization by alternating current; these investigations dealt with the electrochemical reactions

$\text{UO}_2^{2+} + e \rightleftharpoons \text{UO}_2^+$  and  $\text{UO}_2^{2+} + e \rightleftharpoons \text{UO}^+$ . The polarograms of the cathodic reduction of uranyl ions were automatically recorded on a polarograph according to Geyrovskiy, the work having

Card 1/4

The Mechanism of the Electrochemical Reactions on a  
Mercury Cathode in Uranium Salt Solutions

SOV/76-32-7-8/45

been carried out in a hydrogen atmosphere at  $25^{\circ} \pm 0.1^{\circ}\text{C}$ . In the investigations concerning the influence of the concentration of  $\text{H}^+$  ions and of the nature of the anion of the solution on the process of the cathodic reduction the author used constant uranyl ion concentrations in solutions of sulfuric acid, hydrochloric acid and  $\text{HClO}_4$ . The current versus voltage curves obtained showed two and three polarographic waves respectively, corresponding to the acidity of the solutions; the first wave is explained by the reversible reaction

$\text{UO}_2^{2+} + e \rightleftharpoons \text{UO}_2^+$ , while in the presence of three waves the second represents the irreversible reaction  $\text{U}_2^+ + e + 2\text{H}^+ \rightarrow \text{UO}_2^{2+} + \text{H}_2\text{O}$ , and the third wave characterizes the reversible reduction of uranium from the tetra- to the trivalent state  $\text{UO}_2^{2+} + e \rightleftharpoons \text{UO}_2^+$ . The I - E curves of the highly acid  $\text{HCl}$  and  $\text{H}_2\text{SO}_4$  solutions do not show a second wave, and a disproportioning reaction is assumed:  $2 \text{UO}_2^+ + \text{H}^+ \rightleftharpoons \text{UO}_2^{2+} + \text{UO(OH)}^+$ . The function of the value for  $i_d$  of the first wave vs. the nature of the acid

Card 2/4

The Mechanism of the Electrochemical Reactions on a  
Mercury Cathode in Uranium Salt Solutions

SOV/76-32-7-8/45

anion is expressed by the series

$\text{H}_2\text{SO}_4 > \text{HCl} > \text{HClO}_4$  and it was observed that the effect of the anions extend to the various stages of the cathodic reduction. For determining the velocity of disproportioning of the  $\text{UO}_2^+$ -ions an apparatus was used, with the measuring method having an advantage as compared to that by Heal (Ref 6), viz., that the measurements were carried out directly. The technique of current measuring in the determinations carried out in the exchange reactions:  $\text{UO}_2^{2+} + e \rightleftharpoons \text{UO}_2^+$  and  $\text{UO}_2^{2+} + e \rightleftharpoons \text{UO}^+$ , as well as the apparatus has been described in the paper by K.I.Rozental' and B.V.Ershler (Ref 11). From the results of the investigation mentioned may be seen that the electrochemical reduction of  $\text{UO}_2^{2+}$  in  $\text{UO}_2^+$  determines the velocity of the exchange of the first reaction. It was found that the exchange current acquires various values in solutions of different concentrations; this fact is traced back to a function of the degree of dissociation of the uranium (VI)-salts vs. the pH

Card 3/4

The Mechanism of the Electrochemical Reactions on a  
Mercury Cathode in Uranium Salt Solutions

SOV/76-32-7-8/45

of the solution. The determinations in the second exchange reaction showed a linear function of the quantity of the exchange current vs. the  $UO_2^{2+}$  ion concentration in the solution; this is explained by the influence of the electrochemical reduction of the tetravalent ions to trivalent ions on the velocity of the exchange. There are 9 figures, 2 tables, and 11 references, 5 of which are Soviet.

ASSOCIATION: Fiziko-khimicheskiy institut im.L.Ya.Karpova, Moskva (Moscow,  
Physicochemical Institute imeni L.Ya.Karpov)

- 1. Mercury cathodes—Electrochemistry
- 2. Uranium salt solutions
- 3. Uranium—Polarographic analysis
- 4. Exchange reactions

Card 4/4

5(4)

AUTHORS:

Bune, N. Ya., Kolotyrkin, Ya. M.,  
Tyurikov, G. S.

SOV/76-32-12-4/32

TITLE:

The Electrochemical and Corrosion Behaviour of Steel and  
Nickel Electrodes in Sulfuric Acid Solutions Subjected to  
the Action of  $\gamma$ -Rays (Elektrokhimicheskoye i korrozionnoye  
povedeniye stal'nogo i nikel'evogo elektroda v rastvorakh  
sernoy kisloty, podvergayushchikhsya vozdeystviyu  $\gamma$ -izlucheniya)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 12,  
pp 2679 - 2685 (USSR)

ABSTRACT:

$\gamma$ -rays effect a dissociation of water, thereby forming molecules with redox properties. Investigations were made of type 18 - 8 steel and spectrally pure nickel in  $H_2SO_4$  at a  $Co^{60}$   $\gamma$ -radiation period of several hours at an intensity of  $1.5 \cdot 10^{15}$  eV/ml.sec. Without radiation the air-oxidized steel anode had a static potential close to that of the reversible hydrogen electrode. With the electrode remaining in the acid for some time, a partial polarization caused the potential to shift towards negative values. In all cases

Card 1 / 4

The Electrochemical and Corrosion Behaviour of Steel      SOV/76-32-12-4/32  
and Nickel Electrodes in Sulfuric Acid Solutions Subjected to the Action  
of  $\gamma$ -Rays

radiation caused the potential to shift in the positive direction, parallel with the stage of activation of the electrodes.

A comparison with the charge-curves of polarized, activated or air-oxidized steel electrodes in non-irradiated sulfuric acid solution shows that the effect of  $\gamma$ -radiation is equivalent to a polarization by an anode current of  $5 \cdot 10^{-7}$  to  $1 \cdot 10^{-5} \text{ A/cm}^2$ . In the case of nickel electrodes, radiation also results in a shifting of the potential in the positive direction. No polarization is caused here since the amperages obtained through radiolysis are too weak by several orders of magnitude. When radiation is stopped, the nickel potential soon returns to the initial value whereas it almost retains its value with steel. This shows that more stable oxidizing agents (corrosion products) form in the irradiated solution in the presence of steel. To test the foregoing steel electrodes were irradiated in sulfuric acid in the presence of  $\text{Fe}^{++}$  ions. In this case the positive potential shifting also ensued. Since  $\text{Fe}^{++}$  ions are not oxidizing agents they must have been oxidized by the  $\gamma$ -rays

Card 2/4

The Electrochemical and Corrosion Behaviour of Steel SOV/76-32-12-4/32  
and Nickel Electrodes in Sulfuric Acid Solutions Subjected to the Action  
of  $\gamma$ -Rays

to form  $Fe^{++}$  ions. The oxidizing agents forming by dissociation under radiation do not differ as to their effect from trivalent iron. Soon after the beginning of radiation platinum assumes (as Ts. I. Zalkind and V. I. Veselovskiy also stated, Ref 8) a value in the vicinity of the potential of the reversible H-electrode. In the iron-ion a shifting of the potential towards negative values is noticeable immediately after the beginning of the radiation, but the potential soon shifts in the positive direction. The potential of Pt, however, remains more negative than that of steel. With irreversible redox processes on electrode surfaces a more negative potential is to be found with metals with low hydrogen- and high oxygen hypertension than with metals with high hydrogen- and low oxygen hypertension. There are 5 figures and 8 references, 4 of which are Soviet.

Card 3/4

The Electrochemical and Corrosion Behaviour of Steel  
and Nickel Electrodes in Sulfuric Acid Solutions Subjected to the Action  
of  $\gamma$ -Rays

527/76-32-12-4/52

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moscow  
(Physico-Chemical Institute imeni L. Ya. Karpov, Moscow)

SUBMITTED: June 15, 1957

Card 4/4

84629

S/076/60/034/010/009/022  
B015/B064

11/13/0

AUTHORS:

Shub, D. M., Tyurikov, G. S., and Veselovskiy, V. I.

TITLE:

Photo- and Radiation-chemical <sup>19</sup> Decomposition of <sup>17</sup> Hydrogen  
Peroxide in the Presence of Iron Oxide

PERIODICAL:

Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 10,  
pp. 2245-2253

TEXT: The application of semiconductor materials as heterogeneous sensitizers in the transformation of radiation energy into chemical energy is of special importance for the utilization of nuclear radiation to initiate radiation-chemical reactions. In continuation of previous investigations, the results are given of the photo- and radiation-chemical decomposition of concentrated  $H_2O_2$  solutions with suspended  $Fe_2O_3$ . A NPK -2 (PRK-2) quartz lamp served as light source, while  $Co^{60}$  with an activity of 80 Curies was used as  $\gamma$ -radiation source; the experiments were carried out in an apparatus warranting a stabilization of temperature, good mixing of the solution, and regular irradiation. The experimental

Card 1/3

84629

Photo- and Radiation-chemical Decomposition of S/076/60/034/010/009/022  
Hydrogen Peroxide in the Presence of Iron Oxide B015/B064

results obtained show that the catalytic effect of  $\text{Fe}_2\text{O}_3$  upon the  $\text{H}_2\text{O}_2$  decomposition due to light irradiation, as well as the  $\gamma$ -rays is strongly increased. This means that a chain reaction sets in on the surface of  $\text{Fe}_2\text{O}_3$ , which is due to an energy transfer causing an excitation of the particles of the  $\text{Fe}_2\text{O}_3$  surface, and that the chain reaction of the  $\text{H}_2\text{O}_2$  decomposition is passed on into the liquid. The high photo- and radiation-chemical activity of  $\text{Fe}_2\text{O}_3$  can only be due to the effect of a heterogeneous sensitization (which depends on the electronic state of the semiconductor). The active centers on the  $\text{Fe}_2\text{O}_3$  surface which cause the chain reaction are the same in the thermal  $\text{H}_2\text{O}_2$  decomposition and in the decomposition due to radiation. A temperature increase accelerates in both cases the rate of decomposition. Since no particular difference was observed between the effect of the ultraviolet light and the  $\gamma$ -radiation, the reaction mechanism is assumed to be the same in both cases. Apparently, the higher energy (approximately 1.25 Mev) of the  $\gamma$ -quanta is transformed into a

X

Card 2/3

84629

Photo- and Radiation-chemical Decomposition of S/076/60/034/010/009/022  
Hydrogen Peroxide in the Presence of Iron Oxide B015/B064

lower energy (several ev) of the light quanta, thus, causing the same excitation of the semiconductor as the light rays, so that a principal analogy exists between the effect of light and nuclear radiation. The author thanks the laboratory assistant L. G. Kazakova. There are 6 figures, 2 tables, and 11 references: 9 Soviet, 1 British and 1 French.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova  
(Physico-chemical Institute imeni L. Ya. Karpov)

SUBMITTED: February 19, 1959

X

Card 3/3

S.4500  
24,3500 (1137, 1138)

33122  
S/638/61/001/000/053/056  
B125/B104

AUTHORS: Shub, D. M., Tyurikov, G. S., Veselovskiy, V. I.

TITLE: Heterogeneous sensitization of radiochemical processes on  
the semiconductor - solvent interface

SOURCE: Tashkentskaya konferentsiya po mirnomy ispol'zovaniyu  
atomnoy energii. Tashkent, 1959. Trudy. v. 1. Tashkent,  
1961, 370-377

TEXT: Data on the radio-electrochemical process in  $\text{Co}^{60}$  gamma irradiation  
(activity  $\sim 20,000$  g-equ. Ra) of a Cu-Cu<sub>2</sub>O electrode in a 0.1 KOH solution  
are presented. The action of the optical radiation of a 500-watt bulb  
under the same conditions is compared. The system Cu-Cu<sub>2</sub>O-KOH solution  
was irradiated after 3-hr saturation with nitrogen. The radio-electro-  
chemical effect was first determined only from the change of the electrode  
potential under the simultaneous action of cathode current and radiation  
from  $\Delta V_c = V_c - V_T$  at  $I = \text{const}$  for potentials between 0.770 v and 0.200 v.

The potential was shifted toward more positive values by irradiation.  
 $V_c$  and  $V_T$  denote the electrode potential during and after irradiation,  
Card 1/4

33122  
S/638/61/001/000/053/056  
B125/B104

Heterogeneous sensitization ...

respectively. Visible light and gamma rays apparently give rise to similar excitation processes in the semiconductor, with the absolute values of  $\Delta V_c$  under gamma irradiation being higher than with visible light. Fig. 2 shows the typical dependence of potential change on the duration of irradiation for an initial potential of 0.200 v. For the other initial potentials examined, the curve shape was similar, but the absolute values of  $\Delta V_c$  were lower. The potential jump at the beginning and the following slow approach of the potential to the steady state are due to the excitation of the semiconductor and to the electrochemical oxidation, respectively. The components (OH, O<sub>2</sub>) appearing in the radiolysis of water speed up the electrochemical reaction. The experimental results available so far are not sufficient to back the assumption of a specific mechanism for the radio-electrochemical process on the Cu-Cu<sub>2</sub>O electrode. They suffice, however, for the following hypothesis: Due to the action of radiation, Cu<sub>2</sub>O can be oxidized to Cu(OH)<sub>2</sub>: hydrogen peroxide may also be produced by a sensitized reaction involving the oxygen which is always present in Cu<sub>2</sub>O. The radio-electrochemical process on the Cu-Cu<sub>2</sub>O electrode is of interest also for heterogeneous radiation sensitization.

Card 2/4

33122

S/638/61/001/000/053/056

B125/B104

Heterogeneous sensitization ...

A noticeable sensitization, however, is only possible in the case of a sufficiently large acting surface of the sensitizer. According to data available on the damping of luminescence (see also Veselovskiy V. I., Miller N. B., Shub D. M. Sbornik rabot po radiatsionnoy khimii, M., AN SSSR, 49, 1955; Shub D. M., Tyurikov G. S., Veselovskiy V. I., Trudy I Vsesoyuznogo soveshchaniya po radiatsionnoy khimii, M., AN SSSR, 161, 1958), the energy of excitation of a semiconductor by electrons can be transferred to the solution components. A participation of excited electrons of the semiconductor with more than 3.0 ev in the reaction, and an excitation of radio-chemical processes by the energy absorbed and converted by the semiconductor are possible. The rate of disintegration under the action of irradiation is considerably increased by the presence of an  $\text{Fe}_2\text{O}_3$  suspension. In a microheterogeneous system, the suspension  $\text{Fe}_2\text{O}_3\text{-H}_2\text{O}_2$  solution is not substantially changed by radiation, and, therefore, the rate of hydrogen peroxide decomposition does not change either. The heterogeneous process depends on the electron state of the semiconductor, and the active surface centers determining the reaction are of the same nature during decomposition due to heat and irradiation. The Card 3/4

33122

S/638/61/001/000/053/056  
B125/B104

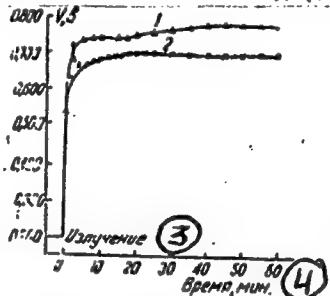
Heterogeneous sensitization ...

experimental data fit the said hypothesis and are indicative of the possible excitation of heterogeneous sensitization processes. There are 5 figures, 1 table, and 8 references: 7 Soviet and 1 non-Soviet.

ASSOCIATION: N.-i. fiziko-khimicheskiy institut im. L. Ya. Karpova  
(Scientific Physicochemical Research Institute imeni L. Ya. Karpov)

Fig. 2. Dependence of the potential change of a Cu-Cu<sub>2</sub>O electrode on the duration of irradiation.

Legend: (1) gamma radiation; (2) optical radiation; (3) radiation;  
(4) time, min.



Card 4/4

L 42177-66 EWT(m)/T/EWP(t)/ETI IJP(c) DS/WM/JD/JG/GD

ACC NR: AT6022481

(A)

SOURCE CODE: UR/0000/65/000/000/0166/0170

AUTHOR: Tyurikov, G. S.; Vasilistov, N. P.; Silakov, A. V.; Pashkov, Yu. M. 47

ORG: Physicochemical Scientific Research Institute im. L. Ya. Karpov (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut) B+1

TITLE: Behavior of palladium and silver electrodes during the electrochemical reduction of oxygen in carbonate melts

SOURCE: Vsesoyuznoye soveshchaniye po fizicheskoy khimii rasplavlenyykh soley. 2d, Kiev, 1963. Fizicheskaya khimiya rasplavlenyykh soley (Physical chemistry of fused salts); trudy soveshchaniya. Moscow, Izd-vo Metallurgiya, 1965, 166-170

TOPIC TAGS: carbonate, silver, palladium, electrode potential, lithium compound, sodium compound, potassium compound, oxidation reduction reaction, oxygen, carbon dioxide

ABSTRACT: The electrochemical reduction of oxygen on Pd and Ag electrodes in molten alkali metal carbonates of various compositions ( $K_2CO_3$ - $Li_2CO_3$ ;  $Na_2CO_3$ - $Li_2CO_3$ ;  $K_2CO_3$ - $Na_2CO_3$ - $Li_2CO_3$ ; pure  $Li_2CO_3$ ) in the presence of  $CO_2$  and  $CO_2+O_2$  was studied by recording I-V curves. In the case of the Pd electrode, the reduction was found to depend strongly on the electrolyte composition: in binary salt mixtures, it becomes more efficient when  $K_2CO_3$  is substituted for  $Na_2CO_3$ , the  $Li_2CO_3$  content being the same. It is shown that the presence of oxides formed on the electrode surface affects

Card 1/2

L 42177-66

ACC NR: AT6022481

the behavior of the latter. The duration of preliminary thermal oxidation of Pd electrodes had a marked influence on the limiting current densities. In the case of the silver electrode, the polarization curves obtained while passing CO<sub>2</sub> showed that the electrode potential shifts by 0.1-0.15 V to the cathodic side. I-V curves showed the establishment of a limiting current at 700-800°C, its value being somewhat greater at 800°C than at 700°C, indicating that more silver dissolves at 800°C. The data obtained confirm earlier hypotheses that the formation of the carbonate ion occurs in two steps. The limiting current in the first step in the case of pure lithium carbonate increases by a factor of 1.5-2, while the steady-state potential shifts toward anodic values by 100-150 mV. This phenomenon may be explained by the specific action of the lithium cation and the presence in the melt of free metal oxides which transport oxygen to the electrode. Orig. art. has: 5 figures.

SUB CODE: 07/ SUEM DATE: 23Aug65/ ORIG REF: 006/ OTH REF: 004

MSI  
Card 2/2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

BREGER, A.Kh.; Prinimali uchastiye: KARPOV, V.L., kand.khim.nauk;  
BELYNSKIY, V.A.; OSIPOV, V.B., PROKUDIN, S.D.; TYURIKOV, G.S.,  
kand.khim.nauk; GOL'DIN, V.A.; RYABUKHIN, Yu.S.; KOROLEV, G.N.;  
AFONIN, V.P.; POKROVSKIY, V.S.; KULAKOV, S.I.; LEKAREV, P.V.;  
FEDOROVA, T.P.; KOROTKOVA, M.A.; KHARLAMOV, M.T.; NIKOLENKO, G.D.;  
LOPUKHIN, A.F.; YEVDOKUNIN, T.F.; KASATKIN, V.M.; RATOV, A.V.

Nuclear radiation sources for radiational-chemical studies.  
Probl.fiz.khim. no.1:61-72 '58. (MIRA 15:11)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut  
im. Karpova.  
(Radiochemistry) (Radioisotopes)

MOZZHUKHIN, A.S.; SERAFIMOV, L.A.; TIMOFEYEV, V.S.; TYURIKOV, I.D.

Apparatus and devices for laboratory rectification. Zav.lab. 29  
no.4: 503-505 '63. (MIRA 16:5)

I. Moskovskiy institut tonkoy khimicheskoy tekhnologii im.  
M.V.Lomonosova.  
(Distillation apparatus)

SEPAFIMOV, L.A.; TIMOFEEV, V.S.; MOZHUKHIN, A.S.; POPOVA, L.M.;  
CHIRIKOVA, Z.P.; TYURIKOV, I.D.

Study and calculation of the rectification process of multicomponent  
mixtures by the separated vapors of the components. Khim. prom. 41  
no.1:42-45 Ja '65. (MIREA 18:3)

SERAFIMOV, L.A.; TYURIKOV, I.D.; RUMYANTSEV, P.G.; L'VOV, S.V.

Liquid - vapor phase equilibrium in the system methyl borate -  
methanol at atmospheric pressure. Zhur. fiz. khim. 38 no.5:  
1326-1331 My '64.  
(MIRA 18:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii  
imeni Lomonosova. Submitted June 29, 1963.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

TYURIKOV, M.V.

Intersigmoid strangulated hernia. Khirurgiia no.2:69 p '55.  
(MIRA 8:5)  
(HEMIA,  
intersigmoid, strangulation)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

TYURIKOV, V. (Kazan')

Lively discussion and not only reading. Sov.torg. 35 no.7:44-  
46 Jl '62. (MIRA 15:11)  
(Kazan—Communist education)

TYURIKOV, V.

The star of the cotton fields. IUn.nat. no.4:17-18 Ap '61.  
(MIRA 14:3)

(Uzbekistan—Cotton growing)

TYURIKOV, V.N., nachal'nik re'l'soshlifoval'nogo poyezda

Consumption of abrasive segments. Put' i put. khoz. " no. 2:39 '65.  
(MIRA 18:7)

TYURIKOV, Yu. A.

Treatment of primary glaucoma with general mineral baths from  
the "Dolinsk No.1" spring at the Nal'chik health resort. Sbor.  
nauch. trud. SOGMI no.14;43-55 '63. (MERA 18;9)

1. Iz kafedry glaznykh bolezney Stavropol'skogo meditsinskogo  
instituta (zav. kafedroy - zasluzhennyj dey tel' nauk RSFSR,  
prof. N.M. Pavlov).

ALEKSANDROVA, Ye.V.; SHVIG, L.A.; I.F. BULAVINA, G...

Kinetics of coagulation of titanium dioxide hydrosols. Vol. 1, Issr.  
26 no. 5:145-646 S-0 '62. (MIA 17:10)

1. Moskovskiy khimiko-tehnologicheskly institut imeni Mandeloyeva  
i Institut fizicheskoy khimii AN SSSR, Moskva.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

ROGACH, A.P., inzhener; TYURIKOVA, P.X., inzhener; ROMANENKO, A.S., inzhener.

Determination of the weight of liquid steel in the ladle during pouring.  
(MIRA 9:9)  
Mg' "urg no.2:38-39 F '56.

I. TzZL Konstantinovskogo metallurgicheskogo zavoda imeni Frunze.  
(Konstantinovka--Smelting) (Liquid metals)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

SUBMITTED: 0804t62

ENCL: 0

SUB CODE: OC, CC

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8"

KUZNETSOV, Ye.V.; FAYZULLINA, D.A.; TYURIKOVA, R.P.

Reaction of aromatic disulfochlorides with trimethyl- and tetramethyl- containing organophosphorus compounds. Vysokom. sozd. 7 no.5:761-764  
(MIRA 18:9)  
My '65.

1. Kazanskij khimiko-tehnologicheskiy institut imeni S.M. Kirova.

L 13295-66 EWT(m)/T/EWP(j) RM  
ACC NR: AP6000330

SOURCE CODE: UR/0286/65/000/021/0019/0019

INVENTOR: Kurnetsov, Ye. V.; Fayzullina, D. A.; Fayzullin, I. N.; Prasolova, T. N.;  
Tyurikova, R. P.

ORG: none

40  
6

TITLE: A method for producing polysulfonates which contain phosphorus. Class 12,  
No. 175964 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 19

TOPIC TAGS: polymer, organic phosphorus compound, sulfonation, SULFUR compound

ABSTRACT: This Author's Certificate introduces a method for producing polysulfonates which contain phosphorus. New polymers are produced by interacting disulfochlorides with organophosphorus compounds which contain hydroxyl radicals.

SUB CODE: 07/ SUBM DATE: 06Jul62/ ORIG REF: 000/ OTH REF: 000

jw  
Card 1/1

UDC: 678.85 : 678.684

TYURIN, A.

Fortitude of an example. Avt.transp. 40 no.2:10-11 F '62.  
(MIRA 15:2)

1. Glavnnyy inzh. Severo-Osetinskogo avtotresta.  
(Ossetia--Highway transport workers)

TYURIN, A.

Competitions are an important part in the activity of the society.  
NTO 3 no.4:34-35 Ap '61. (MIRA 14:3)

1. Zamestitel' predsedatelya Moskovskogo gorodskogo pravleniya  
Nauchno-tekhnicheskikh obshchestv gorodskogo khozyastva i avtomobil'nogo transporta.  
(Moscow—Technical societies)

Cand Tech Sci

TYURIN, A. A., Engineer

Dissertation: "Investigation of Cutting Machines for Three-Sided Cutting."

26/6/50

Moscow Polygraphic Inst

SO Vecheryaya Moskva  
Sum 71

TYURIN, A.A., kand.tekhn.nauk, dotsent

Efficiency of paper-feeding devices on web presses. Nauch. trudy  
MPI no.7/8:29-42 '58. (MIRA 14:12)  
(Printing press--Equipment and supplies)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730003-8

URIN, A.A., kand.tekhn.nauk, dotsent  
Pressure distribution in the printing contact zone. Nauch. trudy  
MPI no.7/8:43-48 '58.  
(Printing press)

08/31/2001

CIA-RDP86-00513R001

TYURIN, Aleksey Fedorovich

[Improving the collective farm economy] Podzem ekonomiki  
kolkhozov. Moskva, Gos.izd-vo sel'skokhoz.lit-ry, 1958.  
(MIRA 12:6)

159 p.

(Collective farms)

NOVOSEL'TSEV, P.I.; TYURIN, A.F.; LIPATOV, N.A., red.; SERGEYEVA, M.I.,  
tekhn. red.

[Collective farm economics] Nekotorye voprosy ekonomiki kolkhozov;  
sbornik statei. Gor'kii, Gor'kovskoe knizhnoe izd-vo, 1961. 105 p.  
(MIRA 14:8)

(Gorkiy Province—Collective farms—Finance)

TYURIN, A.F.

[How the "Avangard" Collective Farm increased its production  
of meat and milk] Kak kolkhoz "Avangard" uvelichivaet proiz-  
vodstvo miasa i moloka. Moskva, Gos. izd-vo selkhoz lit-ry,  
1958. 45 p. (MIRA 12:1)  
(Stock and stockbreeding)

TYURIN, A.G. (Leningrad, L-175, Astrakhanskaya, d. 5/7, kv.15).

Some characteristics of the arterial system of the amputation  
stump of the leg. [with summary in English]. Arkh.anat., glist.  
i embr. 35 no.5:69-74 S-0 '58 (MIRA 11:12)

1. Kafedra normal'noy anatomii (nach. - chlen-korrespondent AMN SSSR  
prof. B.A. Dolgo-Saburov) Voyenno-meditsinskiy ordena Lenina  
Akademii imeni S.M. Kirova.  
(AMPUTATION STUMP, blood supply,  
arterial of leg (Bus))

TYURIN, A.G. (Khmel'nitskaya oblast' ... Slavuta, ul. Frunze 9, kv.2)

Changes in the vasa vasorum of the blood vessels of the lower  
extremities in endarteritis obliterans. Arkh. anat., gist. i  
embr. 47 no.11:45-48 N '64 (MIRA 1961)

1. Kafedra normal'noy anatomii (zav. - prof. V.N. Murat) Vo-  
yennno-meditsinskoy ordena Lenina akademii imeni Kirova. Sub-  
mitted September 28, 1963.